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EXAMINER
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BOSWELL, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/780,189

Applicant(s)

ROMERO, OSCAR

Examiner

Christopher Boswell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

Claims 10, 19, and 30 are objected to because of the following informalities: In claims 10, 19, and 30, the phrase "is effected by" is used, where the examiner believes grammatically incorrect, and should be --is affected by--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14, 16-23, 25-27, and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 4,156,541 to Babb, Jr. et al.

Babb, Jr. et al. disclose an interconnected chassis for a lock set, comprising a mounting plate (72) including a first guide channel (72'), a second guide channel (72') spaced apart from the first guide channel, and a spring engaging member (figures 7 and 8), a lower cam arm (106), having a lower rotational axis, rotatably coupled to the mounting plate, a slide plate (70 and 104) having a spring retention wall (70a) and a spring engaging surface (lower ends of 74), the slide plate being positioned between, and in sliding engagement with, the first guide channel and the second guide channel, and positioned above the lower cam arm, a spring (72), and a spring retention chamber (75) established between the spring retention wall of the slide plate and the mounting plate, the spring retention chamber providing lateral containment of the spring (figures

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7 and 8), the spring being positioned in the spring retention chamber between the spring engaging member of the mounting plate and the spring engaging surface of the slide plate (column 4, lines 4-23), as in claim 1, further comprising an upper cam arm (86), having an upper rotational axis, rotatably coupled to the mounting plate, where the upper cam arm is positioned above the slide plate, as in claim 2, wherein a rotation of the lower cam arm about the lower rotational axis results in a displacement of the slide plate, the displacement of the slide plate causing the slide plate to engage the upper cam arm, resulting in a rotation of the upper cam arm about the upper rotational axis (column 4, lines 4-23), as in claim 3.

Babb, Jr. et al. also disclose a method for providing an interconnected chassis for a lock set, comprising the steps of configuring a mounting plate including a first guide channel, a second guide channel spaced apart from the first guide channel, and a spring engaging member (column 3, lines 36-51), rotatably coupling a lower cam arm, having a lower rotational axis, to the mounting plate (column 4, lines 28-31), configuring a slide plate having a spring retention wall and a spring engaging surface (column 3, lines 36-51), positioning the slide plate between, and in sliding engagement with, the first guide channel and the second guide channel, and above the lower cam arm (column 3, lines 36-51), and establishing a spring retention chamber between the spring retention wall of the slide plate and the mounting plate, the spring retention chamber providing lateral containment of a spring, the spring being positioned in the spring retention chamber between the spring engaging member of the mounting plate and the spring engaging surface of the slide plate (column 4, lines 4-7), as in claim 4, and further comprising the step of rotatably coupling an upper cam arm, having an upper rotational axis, to the mounting plate, the

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upper cam arm being positioned above the slide plate (column 4, lines 14-18), as in claim 5, wherein a rotation of the lower cam arm about the lower rotational axis results in a displacement of the slide plate, the displacement of the slide plate causing the slide plate to engage the upper cam arm, resulting in a rotation of the upper cam arm about the upper rotational axis (column 4, lines 4-44), as in claim 6.

Babb, Jr. et al. further disclose a lock set with an interconnected chassis, having a mounting plate (72) including a first guide channel (72'), a second guide channel (72') spaced apart from the first guide channel, and a first spring engaging member (figure 7 and 8), a first cam arm (106), having a first rotational axis, rotatably coupled to the mounting plate, a second cam arm (86), having a second rotational axis, rotatably coupled to the mounting plate, the first cam arm and the second cam arm being spaced apart, a slide plate (70 and 104) having a first cam arm engagement member (104a), a second cam arm engagement member (70d), and an interior region located between the first cam arm engagement member and the second cam arm engagement member, the interior region of the slide plate having a first spring retention wall (70a) and a first spring engaging surface (lower ends of 74), the slide plate being positioned between, and in sliding engagement with, the first guide channel and the second guide channel, a first compression spring (72), and a first spring retention chamber (75) established between the first spring retention wall of the slide plate and the mounting plate, the first spring retention chamber providing lateral containment of the first compression spring (figures 7 and 8), the first compression spring being positioned in the first spring retention chamber between the first spring engaging member of the mounting plate and the first spring engaging surface of the slide plate,

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as in claim 7, where the first compression spring biasing the second cam arm engagement member of the slide plate into engagement with the second cam arm (column 4, lines 4-7), as in claim 8, as well as a rotation of the second cam arm about the second rotational axis results in a displacement of the slide plate, the displacement of the slide plate causing the first cam arm engagement member of the slide plate to engage the first cam arm, resulting in a rotation of the first cam arm about the first rotational axis (column 4, lines 4-23), as in claim 9, and the rotation of the second cam arm is affected by a corresponding rotation of an interior operator (120), as in claim 10, where the first spring retention wall defines a first elongated cavity in the slide plate (figure 1B), as in claim 11.

Babb, Jr. et al. additionally disclose a second spring engaging member formed at the mounting plate and spaced apart from the first spring engaging member (figure 7 and 8), a second spring retention wall (70a) formed at the slide plate, a second spring engaging surface (lower ends of 74) formed at the slide plate, a second compression spring (72), and a second spring retention chamber (75) established between the second spring retention wall of the slide plate and the mounting plate, the second spring retention chamber providing lateral containment of the second compression spring (figures 7 and 8), the second compression spring being positioned in the second spring retention chamber between the second spring engaging member of the mounting plate and the second spring engaging surface of the slide plate (column 4, lines 4-7), as in claim 12, wherein the second spring retention wall defining a second elongated cavity in the slide plate (figure 1B), as in claim 13, as well as an opening (figure 1C) formed through the second cam arm along the second rotational axis, and an operator (120) having a mounting

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portion (121) and a split half-round spindle (88), the mounting portion being positioned in the opening and attached to the second cam arm, as in claim 14.

Babb, Jr. et al. also disclose a method for providing a lock set with an interconnected chassis, having the steps of configuring a mounting plate for attachment to a door, the mounting plate having a first guide channel, a second guide channel spaced apart from the first guide channel, and a first spring engaging member (column 3, lines 36-51), rotatably coupling a first cam arm, having a first rotational axis, to the mounting plate (column 4, lines 28-31), rotatably coupling a second cam arm, having a second rotational axis, to the mounting plate, the first cam arm and the second cam arm being spaced apart (column 4, lines 14-18), forming a slide plate having a first cam arm engagement member, a second cam arm engagement member, and an interior region located between the first cam arm engagement member and the second cam arm engagement member, the interior region of the slide plate having a first spring retention wall and a first spring engaging surface (column 3, lines 36-51), positioning the slide plate between, and in sliding engagement with, the first guide channel and the second guide channel (column 3, lines 36-51), establishing a first spring retention chamber between the first spring retention wall of the slide plate and the mounting plate, the first spring retention chamber providing lateral containment of a first compression spring (column 4, lines 4-7), and positioning the first compression spring in the first spring retention chamber, and between the first spring engaging member of the mounting plate and the first spring engaging surface of the slide plate (column 4, lines 4-7), as in claim 16, the first compression spring biasing the second cam arm engagement member of the slide plate into engagement with the second cam arm (column 4, lines 4-44), as in

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claim 17, wherein rotating the second cam arm about the second rotational axis results in a displacement of the slide plate, the displacement of the slide plate causing the first cam arm engagement member of the slide plate to engage the first cam arm, resulting in a rotation of the first cam arm about the first rotational axis (column 4, lines 4-44), as in claim 18, wherein the rotating of the second cam arm is effected by a corresponding rotation of an interior operator (column 4, lines 13-16), as in claim 19, and the first spring retention wall defining a first elongated cavity in the slide plate (figure 1B), as in claim 20.

Babb, Jr. et al. further disclose the steps of forming a second spring engaging member at the mounting plate and spaced apart from the first spring engaging member (column 3, lines 36-51), forming a second spring retention wall at the slide plate, forming a second spring engaging surface at the slide plate, and establishing a second spring retention chamber between the second spring retention wall of the slide plate and the mounting plate, the second spring retention chamber providing lateral containment of a second compression spring, the second compression spring being positioned in the second spring retention chamber between the second spring engaging member of the mounting plate and the second spring engaging surface of the slide plate (column 3, lines 36-51), as in claim 21, where the second spring retention wall defines a second elongated cavity in the slide plate (figure 1B), as in claim 22, as well as the steps of forming an opening (figure 1C) in the second cam arm along the second rotational axis, and positioning a mounting portion (121) of an operator (120) having a split half-round spindle (88) in the opening and attaching the mounting portion to the second cam arm, as in claim 23.



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Babb, Jr. et al. additionally disclose an interconnected chassis for a lock set having a mounting plate (72) configured for attachment to a door (14), the mounting plate including a first opening and a second opening (figure 1B) vertically spaced apart from the first opening, a first guide channel (72') and a second guide channel (72') horizontally spaced apart from the first guide channel, and at least a first spring engaging member (figure 7 and 8), a first cam arm (106) having a first rotational axis, the first cam arm being rotatably coupled to the mounting plate at the first opening, a second cam arm (86) having a second rotational axis, the second cam arm being rotatably coupled to the mounting plate at the second opening, a first compression spring (72), and a slide plate (70 and 104) having a first end, a second end, and an interior region between the first end and the second end, the slide plate being positioned between, and in sliding engagement with, the first guide channel and the second guide channel, the slide plate including a first cam arm engagement member (104a) located at the first end of the slide plate and a second cam arm engagement member (70d) located at the second end of the slide plate, the interior region of the slide plate having at least a first spring retention housing, the first spring retention housing having a first elongated cavity (figure 1B) defined by a first spring retention wall (70a) and having a first spring engaging surface (lower ends of 74), the first elongated cavity of the slide plate cooperating with the mounting plate to define a first spring retention chamber (75) that provides lateral containment and support of the first compression spring, the first compression spring being positioned between the first spring engaging member of the mounting plate and the first spring engaging surface of the slide plate, the first compression spring biasing the second cam arm engagement member of the slide plate into engagement with the second cam arm (column 4, lines 4-7), as in claim 25.

Babb, Jr. et al. also disclose the mounting plate includes a second spring engaging member (figures 7 and 8) horizontally spaced apart from the first spring engaging member, a second compression spring (72), and the slide plate having a second spring retention housing having a second elongated cavity (figure 1B) defined by a second spring retention wall (70a) and having a second spring engaging surface (lower ends of 74), where the second elongated cavity of the slide plate cooperates with the mounting plate to define a second spring retention chamber (75) that provides lateral containment and support of the second compression spring, the second compression spring being positioned between the second spring engaging member of the mounting plate and the second spring engaging surface of the slide plate, the first compression spring and the second compression spring biasing the second cam arm engagement member of the slide plate into engagement with the second cam arm (column 4, lines 4-7), as in claim 26.

Babb, Jr. et al. further disclose an opening (figure 1C) formed through the second cam arm along the second rotational axis, and an operator (120) having a mounting portion (121) and a split half-round spindle (88), the mounting portion being positioned in the opening and attached to the second cam arm, as in claim 27, and where a rotation of the second cam arm about the second rotational axis results in a displacement of the slide plate, the displacement of the slide plate causing the first cam arm engagement member of the slide plate to engage the first cam arm, resulting in a rotation of the first cam arm about the first rotational axis (column 4, lines 4-23), as in claim 29, wherein the rotation of the second cam arm is affected by a corresponding rotation of an interior operator (120), as in claim 30.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babb, Jr. et al., as applied above in claims 1-14, 16-23, 25-27, and 29-30, in view of U.S. Patent Number 5,513,505 to Dancs.

Babb, Jr. et al. disclose the invention substantially as claimed. However, Babb, Jr. et al. do not disclose how the mounting portion is attached to the second cam arm. Dancs teaches of utilizing a setscrew to attach two units together in the same field of endeavor for the purpose of holding two units in any adjusted position (column 4, lines 53-60). It would have been obvious to one with ordinary skill in the art at the time the invention was made to use a set screw threaded through a tapped hole in the mounting portion, as taught by Dancs, of the operator to attach the second cam arm of Babb, Jr. et al. in order to hold the mounting portion to the second cam arm in any adjusted position.

### ***Response to Arguments***

Applicant's arguments filed November 29, 2004 have been fully considered but they are not persuasive. The examiner is aware of the use of common reference numbers within Babb, Jr. et al., but with careful review of the specification and drawings, one would be able to distinguish between the different elements. To further clarify the rejection, the examiner points to the spring

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guides as the spring retention chambers, and the spring engaging surface is the closed end of the spring guide.

Regarding the argument that Babb, Jr. et al. do not disclose a spring retention chamber established between a spring retention wall of the slide plate and the mounting plate, as argued on page 4, lines 1-7; page 5, lines 4-9 and lines 16-22; page 6, lines 1-2; and page 8, line 12-page 9, line 4, the examiner respectfully disagrees. Babb, Jr. et al. discloses the slide plate being vertically reciprocated by springs which abut shoulders on the slide plate and a closed end of the spring guides (spring retention chambers), column 4, lines 4-7, where it is visible that the spring guides are in contact with the mounting plate in figures 7 and 8, and thus, the spring retention chamber is between the slide plate and the mounting plate.

Regarding the argument that Babb, Jr. et al. do not provide lateral containment of the spring, as argued on page 4, lines 8-10; page 5, lines 4-9 and 16-22; page 6, lines 1-2; and page 8, line 12-page 9, line 4, the examiner points out that the spring guide completely encompasses the spring, and thus provides lateral stability for the spring, wherein the spring retention chamber is disposed between the mounting plate and the slide plate, as argued on page 4, lines 11-18; page 5, lines 4-9 and 16-22; page 6, lines 1-2; and page 8, line 12-page 9, line 4.

Regarding the argument that Babb, Jr. et al. do not disclose the spindle being a split half-round spindle, as argued on page 8, lines 2-6; page 10, lines 15-22; and page 13, lines 7-15, the examiner respectfully disagrees. As shown in figure 1C, the spindle is half a square drive, and half a round spindle, and thus clearly read on the recited limitation.

Regarding the argument that Babb, Jr. et al. do not disclose an interior region of the slide plate having the spring retention wall and a spring engaging surface, as argued on page 6, lines

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5-9; page 8, line 12-page9, line 4; page 9, lines 12-14; page 10, lines 11-13; and page 11, lines 5-16, the examiner respectfully disagrees. As defined by the applicant, the interior region is located between the first and second cam arm engagement members, where the spring retention member of Babb, Jr. et al. is disposed between the first cam arm engagement member and the second cam arm engagement member, as shown in figure 3.

Regarding the argument that Babb, Jr. et al. do not disclose the second spring, spring retention wall, and retention chamber, as argued on page 6, line 22-page 7, line 12; page 9, line 16- page 10, line 5; and page 12, line 11-page 13, line 5, the examiner respectfully disagrees. As the examiner explained above, Babb, Jr. et al. disclose the invention substantially as claimed, as well as a second spring, spring retention wall, and spring retention chamber substantially identical as the first spring, spring retention wall, and spring retention chamber at a symmetrical location to the second grouping, as shown in figure 3.

Regarding the argument that Babb, Jr. et al. do not disclose a spring retaining wall on the slide plate that defines an elongated cavity in the slide plate, as argued on page 7, lines 14-20; and page 11, line 20-page 12, line 6, the examiner respectfully disagrees. As stated in the prior office action, figure 1B shows a cavity within the slide plate, where the spring retaining wall is at an end of the cavity, and the spring retention chamber is housed within the cavity.

Applicant's arguments, see page 8, lines 8-10, page 11, lines 1-3, and page 13, lines 17-20, filed November 29, 2004, with respect to claims 15, 24, and 28 have been fully considered and are persuasive. The 35 U.S.C. 102 (b) rejection of claims 15, 24, and 28 has been withdrawn; however, these claims are subject to a new 35 U.S.C 103 (a) rejection.

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (571) 272-7087.

The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CJB

March 1, 2005

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